

1. An electrophysiology apparatus comprising:  
a defibrillator to provide electrical stimulation for cardioversion or defibrillation, or  
both;  
a electrophysiology monitoring device to monitor  
electrocariograms/cardiophysiology during an electrophysiology event;  
a plurality of electrodes, each having a first and second end, the first end being  
intracardiacally inserted for operation; and  
a switch to selectively couple the second end of each electrode either to the  
defibrillator or to the monitoring device.

2. The apparatus of claim 1, wherein the switch further comprises a double  
pole double throw (DPDT) relay to selectively couple the set of electrodes either to the  
defibrillator or to the monitoring device.

3. The apparatus of claim 1, wherein the switch further comprises a polarity  
switch to alternate the polarity of the electrodes as coupled to the defibrillator.

4. The apparatus of claim 1, wherein each electrode includes a pin connector  
on one end to connect to the switch and a catheter on the other end, which is electrically  
connected to the pin connector.

5. The apparatus of claim 2, wherein the switch further comprises a control  
switch to couple a energy source to the DPDT relay thereby switching connection of the  
electrodes from the monitoring device to the defibrillator.



8. A switching apparatus for connecting a set of electrodes alternatively to a defibrillator or to an electro-physiology monitoring device, comprising:

a set of electrode contacts;

a set of monitoring output contacts;

a set of defibrillator input contacts; and

a double pole, double throw (DPDT) relay, coupled to the set of electrode contacts,

the set of monitoring output contacts, and the set of defibrillator input

contacts, wherein a normally closed (NC) position of the DPDT relay

couples the set of electrode contacts with the set of monitoring output

contacts and an active position couples the set of electrode contacts with the

set of defibrillator input contacts.

9. The switching apparatus of claim 8, further comprising a polarity switch, coupled between the set of defibrillator input contacts and the DPDT relay, to switch polarity of the set of contact electrodes when the DPDT relay is in the active position.

10. The switching apparatus of claim 8, further comprising a second set of electrode contacts, each having a first end and a second end, the first end being placed on an exterior surface of a patient and the second end coupled to the switch, such that the switch selectively enables the second set of electrodes to connect to the defibrillator input contacts and the monitor output contacts exclusive of the plurality of electrode contacts.

11. The switching apparatus of claim 8, further comprising a transceiver, coupled to the DPDT relay.

12. An electrophysiology apparatus comprising:

a control device, having a transceiver, a signal processor, a power supply, and a switch; and,

a monitoring and treatment device, comprising:

a transceiver, for transmitting and receiving signals from the control device;

a power supply, coupled to the transceiver;

a defibrillator, coupled to the transceiver and the defibrillator, to provide electrical stimulation for cardioversion or defibrillation, or both;

a electrophysiology monitoring device, coupled to the transceiver and the power supply, to monitor cardiophysiology during an electrophysiology event;

a plurality of electrodes, each having a first and second end, the first end being intracardially inserted for operation; and

a switch to selectively couple the second end of each electrode either to the defibrillator or to the monitoring device;

wherein signals are transmitted between the monitoring and treatment device and the control device, which signals are processed by the signal processor to represent the health state of a patient being monitored or are used to control the monitoring and treatment device.

13. The apparatus of claim 12, wherein the switch further comprises a double pole double throw (DPDT) relay to selectively couple the set of electrodes either to the defibrillator or to the monitoring device.

14. The apparatus of claim 12, wherein the switch further comprises a polarity switch to alternate the polarity of the electrodes as coupled to the defibrillator.

15. The apparatus of claim 12, wherein each electrode includes a pin connector on one end to connect to the switch and a catheter on the other end, which is electrically connected to the pin connector.

16. The apparatus of claim 13, wherein the switch further comprises a control switch to couple a energy source to the DPDT relay thereby switching connection of the electrodes from the monitoring device to the defibrillator.

17. The apparatus of claim 12, wherein the monitoring and treatment device further comprises a second set of electrodes, each having a first end and a second end, the first end being placed on an exterior surface of a patient and the second end coupled to the switch, such that the switch selectively enables the second set of electrodes to connect to the defibrillator and the monitoring device exclusive of the plurality of electrodes.

18. The apparatus according to claim 12, wherein the control device further comprises a display, coupled to the signal processor.

19. The apparatus according to claim 12, wherein the control device can transmit signals to the monitoring and treatment device to select between monitoring or treatment operations via the control device switch.

20. The apparatus according to claim 12, wherein the monitoring and treatment device further comprises a display, coupled to the electrodes.

20. The apparatus according to claim 12, wherein the monitoring and treatment device further comprises a display, coupled to the electrodes.